This listing of claims will replace the version of claims appended to the accompanying specification.

Listing of the claims

Claims 1-33 (Cancelled).

Claim 34 (New) A wall of a building, comprising a film attached to the wall of the building, wherein the film has a water vapor diffusion resistance (s_d-value) at a relative humidity of an atmosphere surrounding the vapor retarder in the region of 30% to 50% of 2 to 5 meters diffusion-equivalent air layer thickness, and, at a relative humidity in the region of 60% to 80% which is < 1 meter diffusion-equivalent air layer thickness.

Claim 35 (New) The wall of the building according to claim 34, which further comprises a carrier material attached to the film.

Claim 36 (New) The wall of the building according to claim 35, wherein the carrier material has a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 37 (New) The wall of the building according to claim 35, wherein the carrier material is selected from the group consisting of particle board, chip board, oriented strand board, plywood paneling, gypsum board, fiber reinforced gypsum board, fiber board, cement board, cementitious wood wool board, calcium silica board, fiber insulation batts, fiber insulation slabs, foam insulation slabs, wall paper, and cloth.

Claim 38 (New) The wall of the building according to claim 35, wherein the carrier material is a fiber-reinforced cellulose material.

Claim 39 (New) The wall of the building according to claim 34, further comprising at least two layers of a carrier material, wherein the film is sandwiched between two layers of carrier material, the two layers of carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 40 (New) The wall of the building according to claim 34, wherein the film comprises polyamide.

Claim 41 (New) The wall of the building according to claim 40, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 42 (New) The wall of the building according to claim 41, wherein the polyamide is polyamide 6.

Claim 43 (New) The wall of the building according to claim 34, wherein the film has a thickness of 10 μm to 2 mm.

Claim 44 (New) The wall of the building according to claim 34, wherein the film has a thickness of 20 μm to 100 μm.

Claim 45 (New) The wall of the building according to claim 34, wherein the film comprises a pattern.

Claim 46 (New) The wall of the building according to claim 47, wherein the film comprises a printed color pattern.

Claim 47 (New) A roof of a building, comprising a film attached to the roof of the building, wherein the film has a water vapor diffusion resistance (s_d-value) at a relative humidity of an atmosphere surrounding the vapor retarder in the region of 30% to 50% of 2 to 5 meters diffusion-equivalent air layer thickness, and, at a relative humidity in the region of 60% to 80% which is < 1 meter diffusion-equivalent air layer thickness.

Claim 48 (New) The roof of a building according to claim 47, which further comprises a carrier material attached to the film.

Claim 49 (New) The roof of a building according to claim 48, wherein the carrier material has a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 50 (New) The roof of a building according to claim 48, wherein the carrier material is selected from the group consisting of particle board, chip board, oriented strand board, plywood paneling, gypsum board, fiber reinforced gypsum board, fiber board, cement board, cementitious wood wool board, calcium silica board, fiber insulation batts, fiber insulation slabs, foam insulation slabs, wall paper, and cloth.

Claim 51 (New) The roof of a building according to claim 48, wherein the carrier material is a fiber-reinforced cellulose material.

Claim 52 (New) The roof of a building according to claim 47, further comprising at least two layers of a carrier material, wherein the film is sandwiched between two layers of carrier material, the two layers of carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 53 (New) The roof of a building according to claim 47, wherein the film comprises polyamide.

Claim 54 (New) The roof of a building according to claim 53, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 55 (New) The roof of a building according to claim 54, wherein the polyamide is polyamide 6.

Claim 56 (New) The roof of a building according to claim 47, wherein the film component has a thickness of 10 μm to 2 mm.

Claim 57 (New) The roof of a building according to claim 47, wherein the film component has a thickness of 20 μm to 100 μm.

Claim 58 (New) The roof of a building according to claim 47, wherein the film comprises a pattern.

Claim 59 (New) The roof of a building according to claim 47, wherein the film comprises a printed color pattern.

Claim 60 (New) The roof of a building according to claim 47, wherein the film is positioned between at least two rafters of said roof of the building.

Claim 61 (New) A building structure comprising the wall of a building according to claim 34.

Claim 62 (New) A building structure comprising the wall of a building according to claim 47.

Claim 63 (New) A method of constructing a wall of a building, comprising applying to the wall, a film having a water vapor diffusion resistance (s_d-value) at a relative humidity of an atmosphere surrounding the vapor retarder in the region of 30% to 50% of 2 to 5 meters diffusion-equivalent air layer thickness; and, at a relative humidity in the region of 60% to 80% which is < 1 meter diffusion-equivalent air layer thickness.

Claim 64 (New) The method according to claim 63, wherein the film is attached to a carrier material.

Claim 65 (New) The method according to claim 64, wherein the carrier material has a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 66 (New) The method according to claim 64, wherein the carrier material is selected from the group consisting of particle board, chip board, oriented strand board, plywood paneling, gypsum board, fiber reinforced gypsum board, fiber board, cement board, cementitious wood wool board, calcium silica board, fiber insulation batts, fiber insulation slabs, foam insulation slabs, wall paper, and cloth.

Claim 67 (New) The method according to claim 64, wherein the carrier material is a fiber-reinforced cellulose material.

Claim 68 (New) The method according to claim 63, further comprising at least two layers of a carrier material, wherein the film is sandwiched between two layers of carrier material, the two layers of carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 69 (New) The method according to claim 63, wherein the film comprises polyamide.

Claim 70 (New) The method according to claim 69, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 71 (New) The method according to claim 70, wherein the polyamide is polyamide 6.

Claim 72 (New) The method according to claim 63, wherein the film component has a thickness of 10 μm to 2 mm.

Claim 73 (New) The method according to claim 63, wherein the film component has a thickness of 20 μm to 100 μm.

Claim 74 (New) The method according to claim 63, wherein the film comprises a pattern.

Claim 75 (New) The method according to claim 63, wherein the film comprises a printed color pattern.

Claim 76 (New) A method of constructing a roof of a building, comprising applying to the roof, a film having a water vapor diffusion resistance (s_d-value) at a relative humidity of an atmosphere surrounding the vapor retarder in the region of 30% to 50% of 2 to 5 meters diffusion-equivalent air layer thickness, and, at a relative humidity in the region of 60% to 80% which is < 1 meter diffusion-equivalent air layer thickness.

Claim 77 (New) The method according to claim 76, wherein the film is attached to a carrier material.

Claim 78 (New) The method according to claim 77, wherein the carrier material has a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 79 (New) The method according to claim 78, wherein the carrier material is selected from the group consisting of particle board, chip board, oriented strand board, plywood paneling, gypsum board, fiber reinforced gypsum board, fiber board, cement board, cementitious wood wool board, calcium silica board, fiber insulation batts, fiber insulation slabs, foam insulation slabs, wall paper, and cloth.

Claim 80 (New) The method according to claim 77, wherein the carrier material is a fiber-reinforced cellulose material.

Claim 81 (New) The method according to claim 76, further comprising at least two layers of a carrier material, wherein the film is sandwiched between two layers of carrier material, the two layers of carrier material having a water vapor diffusion resistance which is less than the water vapor diffusion resistance of the film.

Claim 82 (New) The method according to claim 76, wherein the film comprises polyamide.

Claim 83 (New) The method according to claim 82, wherein the polyamide is selected from the group consisting of polyamide 6, polyamide 4, and polyamide 3.

Claim 84 (New) The method according to claim 83, wherein the polyamide is polyamide 6.

Claim 85 (New) The method according to claim 76, wherein the film component has a thickness of 10 μm to 2 mm.

Claim 86 (New) The method according to claim 76, wherein the film component has a thickness of 20 μm to 100 μm.

Claim 87 (New) The method according to claim 76, wherein the film comprises a pattern.

Claim 88 (New) The method according to claim 76, wherein the film comprises a printed color pattern.

Claim 89 (New) The method according to claim 76, wherein the film is applied between at least two rafters of the roof.